

Instructions to install Python 3

System requirements for Python Installation:

1. Operating system: Linux- Ubuntu 16.04 to 17.10, or Windows 7 to 10, with 2GB RAM (4GB preferable)
2. You have to install Python 3.6 and related packages, please follow the installation instructions given below as per your operating system.

The procedure to install Python 3 on Ubuntu Linux OS:

Install Python 3.6:

1. To follow the installation procedure, you need to be connected to the Internet.
2. Open the terminal by pressing Ctrl + Alt + T keys together.
3. Install Python 3.6:
 - a. For Ubuntu 16.04 and Ubuntu 17.04:
 - i. In the terminal, run the command `sudo apt-get install python3.6`
 - ii. Press Enter.
 - iii. The terminal will prompt you for your password, type it in to the terminal.
 - iv. Press Enter.
 - b. For Ubuntu 17.10 and above, the system already comes with Python 3.6 installed by default

Check if Python is Installed Correctly:

1. Open the terminal by pressing Ctrl + Alt + T keys together.
2. Run the command `python3 --version` in the terminal and press Enter.
3. You should get an Output Python 3.6 (or an output resembling this)

Install Numpy, IPython and Matplotlib Libraries:

1. Open the terminal by pressing Ctrl + Alt + T keys together.
2. In the terminal, run the command `sudo apt-get install python3-tk`
3. The terminal may prompt you for your password, type it in to the terminal.
4. Press Enter
5. Type in the following commands followed by the Enter key:
 - a. `python -m pip install numpy`
 - b. `python -m pip install ipython`
 - c. `python -m pip install matplotlib`

Check if Numpy, Matplotlib and IPython are Installed Correctly:

1. Open the terminal by pressing Ctrl + Alt + T keys together.
2. Run the command `ipython3` and press Enter to open the IPython console.
3. You should get the following output (or an output resembling this);

```
Python 3.6 (default, Oct 22 2018, 11:32:17)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.2.0 -- An enhanced Interactive Python. Type '?' for help.
```

In[1]: _

4. In the IPython console, type in the command `import numpy, matplotlib`
5. Press Enter
6. Type in the command `%pylab`
7. Press Enter
8. If all commands are executed without throwing any errors/exceptions as output (no other output will be displayed), then the packages are installed successfully.

The procedure to install Python 3 on Windows OS:

Install Python 3.6:

1. To follow the installation procedure, you need to be connected to the Internet.
2. Visit <https://www.python.org/downloads/release/python-368/>
3. At the bottom locate **Windows x86-64 executable installer** for **64 bits** OS and **Windows x86 executable installer** for **32 bits** OS
4. Click on the located installer file to download.
5. After download completes, double click on the installer file to start the installation procedure.
6. Follow the instructions as per the installer

Important Note: After double clicking the installer, check mark the option “Add Python 3.6 to PATH”

Check if Python is Installed Correctly:

1. Open the cmd window ([Click here](#) to see how to open cmd window)
2. Run the command “**python --version**” or “**python3 --version**” in the cmd window and press Enter.
3. You should get an Output Python 3.6 (or an output resembling this)

Install Numpy, Matplotlib and Ipython:

1. Open the cmd window ([Click here](#) to see how to open cmd window)
2. Type in the following commands followed by the Enter key:
 - a. `python -m pip install numpy`
 - b. `python -m pip install ipython`
 - c. `python -m pip install matplotlib`

Check if Numpy, Matplotlib and Ipython are Installed Correctly:

1. Open the cmd window ([Click here](#) to see how to open cmd window)
2. Run the command `ipython3` and press Enter to open the IPython console.
3. You should get the following output (or an output resembling this);

```
Python 3.6 (default, Oct 22 2018, 11:32:17)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.2.0 -- An enhanced Interactive Python. Type '?' for help.
```

```
In[1]: _
```

4. In the IPython console, type in the command `import numpy, matplotlib`
5. Press Enter
6. Type in the command `%pylab`
7. Press Enter
8. If all commands are executed without throwing any errors/exceptions as output (no other output will be displayed), then the packages are installed successfully.